

ABSTRACT OF THE DISCLOSURE

A method for identifying unculturable microorganisms in which at least one bacterial cell from an environmental sample containing a plurality of microorganisms is isolated, at least one DNA fragment from the at least one bacterial cell is amplified, cloned into at least one *E. coli* vector and sequenced, resulting in identification of at least one DNA sequence. The at least one DNA sequence is compared with existing DNA databases, resulting in identification of the at least one DNA sequence as derived from either an unculturable microorganism or a known microorganism.